

**WHAT IS CLAIMED:**

- 1           1.     An implant adapted to be placed between spinous  
2 processes comprising:  
3                 a spacer that is adapted to fit between spinous processes;  
4                 and  
5                 a means for adjusting the height of the spacer in order to  
6                 adjust the spacing between the spinous processes.
- 1           2.     The implant of claim 1 wherein the spacer has an elliptical  
2 shape in at least one dimension wherein a height of the spacer in that  
3 dimension is less than a length of the spacer in another dimension.
- 1           3.     The implant of claim 1 wherein the spacer has a first  
2 portion and a second portion which are movable relative to each other.
- 1           4.     The implant of claim 1 wherein the adjusting means  
2 includes a first portion and a second portion of the spacer connected by  
3 a hinge.
- 1           5.     The implant of claim 1 wherein the adjusting means  
2 includes the spacer of the implant further comprises a slotted sphere.
- 1           6.     The implant of claim 5 wherein the slotted sphere engages  
2 the first and second portion of the spacer to maintain the profile height.
- 1           7.     The implant of claim 5 wherein the slotted sphere engages  
2 a screw extending from between first and second portion of the spacer  
3 to maintain the profile height.
- 1           8.     The implant of claim 3 wherein the first portion and the  
2 second portion each have a curved surface on a first side and a height  
3 adjuster contacting surface on a second side opposite the first side.

1           9.     The implant of claim 1 wherein the adjusting means of the  
2 implant further comprises a jack.

1           10.    The implant of claim 9 where the said jack is adjustable to  
2 a greater profile and a lesser profile by turning a screw in one of a first  
3 direction and a second direction.

1           11.    An implant adapted to be placed between spinous  
2 processes comprising:

3                   a body having a shaft extending therefrom;  
4                   a spacer pivotally mounted on the body, the spacer  
5 including a first portion and a second portion; and  
6                   a mechanism positioned between the first portion and the  
7 second portion that can adjust a space between the first and  
8 second portion.

1           12.    The implant of claim 11 wherein the spacer has an elliptical  
2 shape.

1           13.    The implant of claim 11 wherein the first portion and the  
2 second portion of the spacer are connected proximal to an end thereof  
3 by a hinge.

1           14.    The implant of claim 11 wherein the mechanism of the  
2 implant further comprises a slotted sphere.

1           15.    The implant of claim 14 wherein the slotted sphere  
2 engages the first and second portion of the spacer to maintain the profile  
3 height.

1           16.    The implant of claim 14 wherein the slotted sphere  
2 engages a screw extending from the hinge between the first and second  
3 portion of the spacer to maintain the profile height.

1           17.    The implant of claim 11 wherein the first portion and the  
2   second portion each have a curved surface on a first side and a height  
3   adjuster surface on a second side opposite the first side.

1           18.    The implant of claim 11 wherein the mechanism of the  
2   implant further comprises a jack.

1           19.    The implant of claim 18 wherein the jack engages the first  
2   and second portion of the spacer to maintain the profile height.

1           20.    The implant of claim 18 wherein the jack is adjustable to a  
2   greater profile and a lesser profile by turning a screw in one of a first  
3   direction and a second direction.

1           21.    An implant adapted to be placed between spinous  
2   processes comprising:

3                   a body having a shaft extending therefrom;  
4                   a first wing extending from the shaft and adapted to be  
5           placed adjacent a first and a second spinous process;  
6                   a tissue expander extending from the distal end of the  
7           shaft;  
8                   a spacer that is rotatably mounted to the shaft, the spacer  
9           having a first portion and a second portion; and  
10                  a mechanism that is mounted to the spacer and that can  
11           adjust the spacing between the first and second portions of the  
12           spacer.

1           22.    The implant of claim 21 wherein the spacer is elliptical in  
2   shape with the first portion and the second portion divided about a major  
3   axis of the elliptical shaped spacer.

1           23.    The implant of claim 21 wherein the first portion and the  
2   second portion of the spacer are connected by a hinge.

1           24.    The implant of claim 21 wherein the mechanism of the  
2    implant further comprises a slotted sphere.

1           25.    The implant of claim 24 wherein the slotted sphere  
2    engages the first and second portion of the spacer to maintain the profile  
3    height.

1           26.    The implant of claim 24 wherein the slotted sphere  
2    engages a screw extending from between the first and second portion of  
3    the spacer to maintain the profile height.

1           27.    The implant of claim 21 wherein the mechanism of the  
2    implant further comprises a jack.

1           28.    The implant of claim 27 wherein the jack engages the first  
2    and second portion of the spacer to maintain the profile height.

1           29.    The implant of claim 27 where the said jack is adjustable to  
2    a greater profile and a lesser profile by turning a screw in one of a first  
3    direction and a second direction.

1           30.    An implant adapted to be placed between spinous  
2    processes comprising:  
3                   a body having a shaft extending therefrom; and  
4                   a spacer that is rotatably mounted on the shaft,  
5                   wherein the spacer has an adjustable profile.

1           31.    The implant of claim 30 wherein the spacer has an elliptical  
2    shape.

1           32.    The implant of claim 30 wherein the spacer has a first  
2    portion and a second portion.

1           33.    The implant of claim 32 wherein the first portion and the  
2   second portion of the spacer are connected by a hinge.

1           34.    The implant of claim 30 wherein the spacer of the implant  
2   further comprises a slotted sphere.

1           35.    The implant of claim 34 wherein the slotted sphere  
2   engages the first and second portion of the spacer to maintain the profile  
3   height.

1           36.    The implant of claim 34 wherein the slotted sphere  
2   engages a screw to maintain the profile height.

1           37.    The implant of claim 32 wherein the first portion and the  
2   second portion each have a curved surface on a first side and a height  
3   adjuster contacting surface on a second side opposite the first side.

1           38.    The implant of claim 30 wherein the spacer of the implant  
2   further includes a jack.

1           39.    An implant adapted to be placed between spinous  
2   processes comprising:

3                   a body having a shaft extending therefrom; and  
4                   a spacer that is rotatably mounted on the shaft;  
5                   wherein the spacer has a hinged body having a first portion  
6   and a second portion; and  
7                   a device to adjust a space between the first portion and the  
8   second portion.

1           40.    The implant of claim 39 wherein the device of the implant  
2   further comprises a slotted sphere.

1           41.    The implant of claim 40 wherein the slotted sphere  
2 engages the first and second portion of the spacer to maintain the profile  
3 height.

1           42.    The implant of claim 39 wherein the device of the implant  
2 further comprises a jack.

1           43.    A method of implanting a device between an upper and  
2 lower spinous process in a spine, the method comprising:

- 3                   a.    exposing an affected region of the spine posteriorly;
- 4                   b.    inserting an implant between the spinous
- 5                   processes;
- 6                   c.    adjusting the profile of the implant; and
- 7                   d.    closing the wound.

1           44.    A method of adjusting an interspinous implant, the method  
2 comprising:

- 3                   a.    accessing the implant with a cannula; and
- 4                   b.    adjusting a profile of the implant with a tool
- 5                   accessed through the cannula.

1           45.    A method of adjusting an implanted interspinous implant  
2 having a body having a shaft extending therefrom, a spacer pivotally  
3 mounted on the body, and a screw for adjusting the space between a  
4 first portion and a second portion of the spacer, the method comprising:

- 5                   a.    accessing the screw of the implanted interspinous
- 6                   implant through an incision with a cannula; and
- 7                   b.    adjusting a profile of the implant with a tool
- 8                   accessed through the cannula by turning the screw of the implant
- 9                   in one of a first direction or a second direction.